

PS90
09.13

OIPE

RAW SEQUENCE LISTING

DATE: 09/21/2001

PATENT APPLICATION: US/09/944,807

TIME: 20:48:14

Input Set : A:\Sequence Listing 1_1144.txt
Output Set: N:\CRF3\09212001\I944807.raw

3 <110> APPLICANT: Boehringer Ingelheim Pharma KG
5 <120> TITLE OF INVENTION: Method for identifying substances which positively
6 influence inflammatory conditions of chronic
7 inflammatory airway diseases
9 <130> FILE REFERENCE: 082_00n

C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/944,807
C--> 12 <141> CURRENT FILING DATE: 2001-08-31
14 <150> PRIOR APPLICATION NUMBER: UK 0021484.1
15 <151> PRIOR FILING DATE: 2000-09-01
17 <160> NUMBER OF SEQ ID NOS: 24
19 <170> SOFTWARE: PatentIn Ver. 2.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 1910
23 <212> TYPE: DNA
24 <213> ORGANISM: Homo sapiens
26 <400> SEQUENCE: 1
27 gaaaaggagc ttagctgctg gtgctgctgg caagatggaa accaacttct ccactccct 60
28 gaatgaatat gaagaagtgt cctatgagtc tgctggctac actgttctgc ggatccccc 120
29 attgggtggtgc ttccggatca cctttgtcct cggggctcgt ggcaatgggc ttgtgatctg 180
30 ggtggctgga ttccggatga cacgcacagt caccaccatc tgacctcgtg acctggccct 240
31 ggctgacttt tcttcacgg ccacattacc attcctcatt gtctccatgg ccatgggaga 300
32 aaaatggcct ttggctgtt tcctgtgtaa gtttaattcac atcgtgggtt acatcaacct 360
33 ctttggaaagt gtcttcttgc ttgggttcat tgcactggac cgctgcattt gtgtccgtca 420
34 tccagttctgg gcccagaacc accgcactgt gagtctggcc atgaaggtga tcgtcgacc 480
35 ttggatttctt gctctgtcc ttaccttgcc agtttccctc ttttgacta cagtaactat 540
36 tccaaatggg gacacataact gtactttcaa ctttgcattt cttgggtggca cccctgagga 600
37 gaggctgaag gtggccattt ccatgctgac agccagaggg attatccgtt ttgtcattgg 660
38 cttagcttgc ccatgatgtcca ttgttgcatt ctgctatggg ctcattgcag ccaagatcca 720
39 caaaaaggc atgattaaat ccagccgtcc cttacgggtc ctcactgtg tggtggcttc 780
40 ttcttcattt tggtggtttc ctttcaact ggttgcctt ctggcaccg tctggctcaa 840
41 agagatgttgc ttctatggca agtacaaaat cattgacatc ctggtaacc caacgagtc 900
42 cctggcccttc ttcaacagct gcctcaaccc catgcttac gtcttgcgtt gccaagactt 960
43 ccgagagaga ctgatccact ccctgcccac cagtctggag agggccctgt ctgaggactc 1020
44 agccccaaact aatgacacgg ctgccaattt tgcttcaccc cctgcagaga ctgagttaca 1080
45 ggcaatgtga ggatgggggtc agggatattt tgagttctgt tcataccctt ctaatgccag 1140
46 ttccagcttc atctaccctt gagtcattt gaggcattca aggatgcaca gctcaagtat 1200
47 ttattcagga aaaaatgttt tggtccctt atttgggtt aagaaataga cagtcagct 1260
48 actaaaaat tagtgttatt ttttgtttt tgacttctgc ctataccctg gggtaagtgg 1320
49 agtggggaaa tacaagaaga gaaagaccgg tggggatttg taagacttag atgagatagt 1380
50 gcataataag gggaaagactt taaagtataa agtaaaatgt ttgtgttagg tttttatag 1440
51 ctattaaaaa aatcagattt atgaaagttt tttctatatt ttagtttgct aagagtttc 1500.
52 tggttctttt tcttacatca tgagtggact ttgcattttt tcaaatgtat tttctacatg 1560
53 tattaagatg gtcatattat tcttcttctt ttatgttaat cattataaat aatgttcatt 1620
54 aagttctgaa tggtaaacta ctcttgaattt cctggaaataa accacactta gtcctgtatgt 1680
55 actttaaata ttatatatctc acaggagttt gttagaattt ctgtgtttat gtttatatac 1740
56 tggttatttca ctttttctac tatccttgcgtt aagtttcat agaaaataag gaacaaagag 1800
57 aaacttgcataa tggtctctqaa aaaaqgatgtt aqaaqtaattt cctctqattt tggtttctqq 1860

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/944,807

DATE: 09/21/2001
TIME: 20:48:14

Input Set : A:\Sequence Listing 1_1144.txt
Output Set: N:\CRF3\09212001\I944807.raw

58 tgttatatct ttatcaaata ttcagaaaaa ttcaccagtg aaaaaaaaaaa 1910
 61 <210> SEQ ID NO: 2
 62 <211> LENGTH: 351
 63 <212> TYPE: PRT
 64 <213> ORGANISM: Homo sapiens
 66 <400> SEQUENCE: 2
 67 Met Glu Thr Asn Phe Ser Thr Pro Leu Asn Glu Tyr Glu Glu Val Ser
 1 5 10 15
 70 Tyr Glu Ser Ala Gly Tyr Thr Val Leu Arg Ile Leu Pro Leu Val Val
 20 25 30
 73 Leu Gly Val Thr Phe Val Leu Gly Val Leu Gly Asn Gly Leu Val Ile
 35 40 45
 76 Trp Val Ala Gly Phe Arg Met Thr Arg Thr Val Thr Thr Ile Cys Tyr
 50 55 60
 79 Leu Asn Leu Ala Leu Ala Asp Phe Ser Phe Thr Ala Thr Leu Pro Phe
 65 70 75 80
 82 Leu Ile Val Ser Met Ala Met Gly Glu Lys Trp Pro Phe Gly Trp Phe
 85 90 95
 85 Leu Cys Lys Leu Ile His Ile Val Val Asp Ile Asn Leu Phe Gly Ser
 100 105 110
 88 Val Phe Leu Ile Gly Phe Ile Ala Leu Asp Arg Cys Ile Cys Val Leu
 115 120 125
 91 His Pro Val Trp Ala Gln Asn His Arg Thr Val Ser Leu Ala Met Lys
 130 135 140
 94 Val Ile Val Gly Pro Trp Ile Leu Ala Leu Val Leu Thr Leu Pro Val
 145 150 155 160
 97 Phe Leu Phe Leu Thr Thr Val Thr Ile Pro Asn Gly Asp Thr Tyr Cys
 165 170 175
 100 Thr Phe Asn Phe Ala Ser Trp Gly Thr Pro Glu Glu Arg Leu Lys
 180 185 190
 103 Val Ala Ile Thr Met Leu Thr Ala Arg Gly Ile Ile Arg Phe Val Ile
 195 200 205
 106 Gly Phe Ser Leu Pro Met Ser Ile Val Ala Ile Cys Tyr Gly Leu Ile
 210 215 220
 109 Ala Ala Lys Ile His Lys Lys Gly Met Ile Lys Ser Ser Arg Pro Leu
 225 230 235 240
 112 Arg Val Leu Thr Ala Val Val Ala Ser Phe Phe Ile Cys Trp Phe Pro
 245 250 255
 115 Phe Gln Leu Val Ala Leu Leu Gly Thr Val Trp Leu Lys Glu Met Leu
 260 265 270
 118 Phe Tyr Gly Lys Tyr Lys Ile Ile Asp Ile Leu Val Asn Pro Thr Ser
 275 280 285
 121 Ser Leu Ala Phe Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Val Phe
 290 295 300
 124 Val Gly Gln Asp Phe Arg Glu Arg Leu Ile His Ser Leu Pro Thr Ser
 305 310 315 320
 127 Leu Glu Arg Ala Leu Ser Glu Asp Ser Ala Pro Thr Asn Asp Thr Ala
 325 330 335
 130 Ala Asn Ser Ala Ser Pro Pro Ala Glu Thr Glu Leu Gln Ala Met

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/944,807

DATE: 09/21/2001
TIME: 20:48:14

Input Set : A:\Sequence Listing 1_1144.txt
Output Set: N:\CRF3\09212001\I944807.raw

131	340	345	350
134 <210> SEQ ID NO: 3			
135 <211> LENGTH: 2433			
136 <212> TYPE: DNA			
137 <213> ORGANISM: Homo sapiens			
139 <400> SEQUENCE: 3			
140 cagccgcggc ccatggagcc cgccggcccg gccccgggcc gcctcgggcc gctgctctgc 60			
141 ctgctctcg ccgcgtctcg cgcctggtca ggagtggcg gtgaggagga gctgcaggtg 120			
142 attcagcctcg acaagtccgt atcagttgca gctggagagt cggccattct gcactgcact 180			
143 gtgacacctcc tgatccctgt ggggcccata cagtggttca gaggagctgg accagcccg 240			
144 gaattaatct acaatcaaaa agaaggccac ttcccccggg taacaactgt ttcagagttcc 300			
145 acaaagagag aaaacatggc cttttccatc agcatcagta acatcacccc agcagatgcc 360			
146 ggcacctaact actgtgtgaa gttccggaaa gggagccctg acacggagtt taagtctgga 420			
147 gcaggactg agctgtctgt gctgtccaaa ccctctgccc ccgtgttatc gggccctgcg 480			
148 gcgaggccca cacccatcgca cacagtggc ttccacccatcg agtcccacgg ctttcaccc 540			
149 agagacatca ccctgaaatg gttcaaaaat gggatgagc tctcagactt ccagaccaac 600			
150 gtggaccccg taggagagag cgtgtcttac agcatccaca gcacagccaa ggtggtgctg 660			
151 accccgcagg acgttcaactc tcaagtcatc tgcgagggtgg cccacgtcac cttgcagggg 720			
152 gaccctcttc gtggactgc caacttgttct gagaccatcc gagttccacc caccttggag 780			
153 gttactcaac agcccgtag ggcagagaac caggtaatg tcacctgcca ggtgaggaag 840			
154 ttctacccccc agagactaca gctgacctgg ttggagaatg gaaacgtgtc ccggacagaa 900			
155 acggcctcaa ccgttacaga gaacaaggat ggtacccatc actggatgag ctggctctg 960			
156 gtgaatgtat ctgcccacag ggtatgttgc aagctcacct gccaggtgga gcatgacggg 1020			
157 cagccagccgg tcagcaaaaag ccatgacctg aaggctctcag cccacccgaa ggagcaggc 1080			
158 tcaaataccg ccgctgagaa cactggatct aatgaacggc acatctatat tgtggtggt 1140			
159 gtggtgtgca ccttgcgtt ggcctactg atggccggccc tctacctcgat cogaatcaga 1200			
160 cagaagaaaag cccaggccctc cacttcttct acaaggttgc atgagcccgaa gaagaatgcc 1260			
161 agagaaaataa cacaggacac aaatgtatc acatatgcag acctgaacct gcccagggg 1320			
162 aagaagcctg ctccccaggc tgcggagccc aacaaccaca cggagtatgc cagcattcag 1380			
163 accagcccgcc agcccgctc ggaggacacc ctcacccatcg ctgacccatcg catggccac 1440			
164 ctcaaccggc ccccaagca gcccggccccc aagccctgagc cgtccctctc agatgcgcc 1500			
165 agcgtccagg tcccgaggaa gtgaatgggca cctgtgttttgc ctctagcacc catctctacg 1560			
166 cgctttcttg tcccacaggc agccggccgtg atgagccatcg ccaacccatcg tcccgagggg 1620			
167 ctggggcggt gcaggctctg gaccccgagg gcccagggtgg ctcttctctc cccacccctc 1680			
168 ctggctctc cagcaattcc tgggcagcca cggcccccctc ccccaacatt gcccacacacc 1740			
169 tggaggctga cgttgcggaaa ccagccaggaa aaccaacccatcg ggaagtggcc agaactgcct 1800			
170 ggggtccaag aactttgtg cctccgttca tcaccatgtg ggttttgaag accctcgact 1860			
171 gctccccca tgctccgaag cctgatctc cagggtgggg aggagaaaaat cccacccccc 1920			
172 ctgacccctca ccacccatcc caccaccacc accaccacca ccaccactac caccaccacc 1980			
173 caactggggc tagagtgggg aagatttccc cttagatca aactgccccct tccatggaaa 2040			
174 agctggaaaaaa aactctggc accccatatcc aggcttggtg aggttgcgtc caacagtcct 2100			
175 ggcctccccc atcccttaggc aaagagccat gacttgcgtt gggggccca 2160			
176 aaggactggc agcaaaaaccct tctgtttctc tgggtccctc caagactccc tggggccca 2220			
177 ctgtgttgc ccacccggac ccatctctcc cttctagacc tgagcttgc cctccagcta 2280			
178 gcaactaagca acatctcgct gtaagcgcct gtaaattact gtgaaatgtg aaacgtgca 2340			
179 tcttggaaact gaggtgttag aaaacttgcat ctgtgttgc ttgttttgc tttttctt 2400			
180 aaacaacaggc aacgtgaaaaaaa aaaaaaaaaaaa aaa 2433			
183 <210> SEQ ID NO: 4			
184 <211> LENGTH: 503			

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/944,807

DATE: 09/21/2001
TIME: 20:48:14

Input Set : A:\Sequence Listing 1_1144.txt
Output Set: N:\CRF3\09212001\I944807.raw

185 <212> TYPE: PRT
186 <213> ORGANISM: Homo sapiens
188 <400> SEQUENCE: 4
189 Met Glu Pro Ala Gly Pro Ala Pro Gly Arg Leu Gly Pro Leu Leu Cys
190 1 5 10 15
192 Leu Leu Leu Ala Ala Ser Cys Ala Trp Ser Gly Val Ala Gly Glu Glu
193 20 25 30
195 Glu Leu Gln Val Ile Gln Pro Asp Lys Ser Val Ser Val Ala Ala Gly
196 35 40 45
198 Glu Ser Ala Ile Leu His Cys Thr Val Thr Ser Leu Ile Pro Val Gly
199 50 55 60
201 Pro Ile Gln Trp Phe Arg Gly Ala Gly Pro Ala Arg Glu Leu Ile Tyr
202 65 70 75 80
204 Asn Gln Lys Glu Gly His Phe Pro Arg Val Thr Thr Val Ser Glu Ser
205 85 90 95
207 Thr Lys Arg Glu Asn Met Asp Phe Ser Ile Ser Ile Ser Asn Ile Thr
208 100 105 110
210 Pro Ala Asp Ala Gly Thr Tyr Tyr Cys Val Lys Phe Arg Lys Gly Ser
211 115 120 125
213 Pro Asp Thr Glu Phe Lys Ser Gly Ala Gly Thr Glu Leu Ser Val Arg
214 130 135 140
216 Ala Lys Pro Ser Ala Pro Val Val Ser Gly Pro Ala Ala Arg Ala Thr
217 145 150 155 160
219 Pro/Gln His Thr Val Ser Phe Thr Cys Glu Ser His Gly Phe Ser Pro
220 165 170 175
222 Arg Asp Ile Thr Leu Lys Trp Phe Lys Asn Gly Asn Glu Leu Ser Asp
223 180 185 190
225 Phe Gln Thr Asn Val Asp Pro Val Gly Glu Ser Val Ser Tyr Ser Ile
226 195 200 205
228 His Ser Thr Ala Lys Val Val Leu Thr Arg Glu Asp Val His Ser Gln
229 210 215 220
231 Val Ile Cys Glu Val Ala His Val Thr Leu Gln Gly Asp Pro Leu Arg
232 225 230 235 240
234 Gly Thr Ala Asn Leu Ser Glu Thr Ile Arg Val Pro Pro Thr Leu Glu
235 245 250 255
237 Val Thr Gln Gln Pro Val Arg Ala Glu Asn Gln Val Asn Val Thr Cys
238 260 265 270
240 Gln Val Arg Lys Phe Tyr Pro Gln Arg Leu Gln Leu Thr Trp Leu Glu
241 275 280 285
243 Asn Gly Asn Val Ser Arg Thr Glu Thr Ala Ser Thr Val Thr Glu Asn
244 290 295 300
246 Lys Asp Gly Thr Tyr Asn Trp Met Ser Trp Leu Leu Val Asn Val Ser
247 305 310 315 320
249 Ala His Arg Asp Asp Val Lys Leu Thr Cys Gln Val Glu His Asp Gly
250 325 330 335
252 Gln Pro Ala Val Ser Lys Ser His Asp Leu Lys Val Ser Ala His Pro
253 340 345 350
255 Lys Glu Gln Gly Ser Asn Thr Ala Ala Glu Asn Thr Gly Ser Asn Glu
256 355 360 365

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/944,807

DATE: 09/21/2001
TIME: 20:48:14

Input Set : A:\Sequence Listing 1_1144.txt
Output Set: N:\CRF3\09212001\I944807.raw

258 Arg Asn Ile Tyr Ile Val Val Gly Val Val Cys Thr Leu Leu Val Ala
259 370 375 380
261 Leu Leu Met Ala Ala Leu Tyr Leu Val Arg Ile Arg Gln Lys Lys Ala
262 385 390 395 400
264 Gln Gly Ser Thr Ser Ser Thr Arg Leu His Glu Pro Glu Lys Asn Ala
265 405 410 415
267 Arg Glu Ile Thr Gln Asp Thr Asn Asp Ile Thr Tyr Ala Asp Leu Asn
268 420 425 430
270 Leu Pro Lys Gly Lys Lys Pro Ala Pro Gln Ala Ala Glu Pro Asn Asn
271 435 440 445
273 His Thr Glu Tyr Ala Ser Ile Gln Thr Ser Pro Gln Pro Ala Ser Glu
274 450 455 460
276 Asp Thr Leu Thr Tyr Ala Asp Leu Asp Met Val His Leu Asn Arg Thr
277 465 470 475 480
279 Pro Lys Gln Pro Ala Pro Lys Pro Glu Pro Ser Phe Ser Glu Tyr Ala
280 485 490 495
282 Ser Val Gln Val Pro Arg Lys
283 500
286 <210> SEQ ID NO: 5
287 <211> LENGTH: 759
288 <212> TYPE: DNA
289 <213> ORGANISM: Homo sapiens
291 <400> SEQUENCE: 5
292 ctgtgctgta aaaacaagag taacatttt atattaaagt taaataaagt tacaactttg 60
293 aagagagttt ctgcaagaca tgacacaaaag ctgctagcag aaaatcaaaa cgctgattaa 120
294 aagaagcacg gtatgtatgac caaacataaa aagtgttttta taattgttgg tggtttaata 180
295 acaactaata ttattactct gatagttaaa ctaactcgag attctcagag tttatgc(cc)cc 240
296 tatgatttggaa ttggtttcca aaacaaatgc tattatttct ctaaagaaga aggagattgg 300
297 aattcaagta aatacaactg ttccactcaa catggccgacc taactataat tgacaacata 360
298 gaagaaaatga attttcttag gcgggtataaaa tgcagttctg atcactggat tggactgaag 420
299 atggcaaaaaa atcgaacagg acaatgggtt catggagcta catttaccaa atcgtttggc 480
300 atgagaggaa gtgaaggatg tgccttacctc agcgatgtt gtcagcaac agcttagatgt 540
301 tacaccgaaa gaaaatggat ttgcaggaaa agaataactt aagttaatgt ctaagataat 600
302 ggggaaaata gaaaataaca ttattaatgt taaaaccagc aaagtacttt tttttaattaaa 660
303 caaagttcga gttttgtacc tgcgttgttta attctgctta cgtgtcaggc tacacataaaa 720
304 agccacttca aagattggca .aaaaaaaaa .aaaaaaaaa 759
307 <210> SEQ ID NO: 6
308 <211> LENGTH: 149
309 <212> TYPE: PRT
310 <213> ORGANISM: Homo sapiens
312 <400> SEQUENCE: 6
313 Met Met Thr Lys His Lys Lys Cys Phe Ile Ile Val Gly Val Leu Ile
314 1 5 10 15
316 Thr Thr Asn Ile Ile Thr Leu Ile Val Lys Leu Thr Arg Asp Ser Gln
317 20 25 30
319 Ser Leu Cys Pro Tyr Asp Trp Ile Gly Phe Gln Asn Lys Cys Tyr Tyr
320 35 40 45
322 Phe Ser Lys Glu Glu Gly Asp Trp Asn Ser Ser Lys Tyr Asn Cys Ser
323 50 55 60

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/944,807

DATE: 09/21/2001

TIME: 20:48:15

Input Set : A:\Sequence Listing 1_1144.txt
Output Set: N:\CRF3\09212001\I944807.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date